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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/736,959

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Myung Chul Song

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35884

7590

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EXAMINER

ABDI, AMARA

ART UNIT

PAPER NUMBER

2624

NOTIFICATION DATE

DELIVERY MODE

07/09/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATENT@LHLAW.COM

<b>Office Action Summary</b>	<b>Application No.</b> 10/736,959	<b>Applicant(s)</b> SONG ET AL.	
	<b>Examiner</b> Amara Abdi	<b>Art Unit</b> 2624	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 11-14 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10, 15 and 16 is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 05, 2008 has been entered.

Applicant's response to the last office action, filed May 05, 2008 has been entered and made of record.

### **Remarks:**

2. Applicant's argument with respect to claims 1-9, have been fully considered, but they are not persuasive.

Applicant argues that Jung fails to teach or suggest "control information is developed responsive to movement occurring in the images".

However, in response to applicant's argument, the Examiner disagrees, because Jung discloses the calculating of coordinates of each of parts of the recognized object (see the Abstract, line 22-24), which may be read as the command control that occurs after each individual's movement.

in more precision, each individual's movement such as lips, blinking of eyes, or nodding of head will comprise the calculation of coordinates of each of parts of the

recognized object, and at the same time, the user will input a command transmission, such as a picture information, a particular alphanumeric character, or an icon, that will be correlated to each coordinate of parts of recognized object.

Therefore, claims 1 and 7 are still not in condition for allowance.

Claims, 2-6, and 8-9 depend from claims 1 and 7 respectively; therefore, they are not in condition for allowance.

**Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung et al. (KR 10-2002-17576) in view of Hirano et al. (US-PGPUB 2005/0221856).

**(1) Regarding claim 1:**

Jung et al. disclose a motion capture system, comprising:

a photograph apparatus connected to the terminal (See the Abstract, line 9-13);

an image processing unit for processing images produced by the photographic apparatus (See the Abstract, line 16-24) ; wherein control information is developed responsive to moving occurring in the images (See the Abstract, line 22-24), (the calculating of coordinates of each of parts of the recognized object is read as the command control that occurs after each individual's movement)

an operational controlling unit for corresponding an operational function of the terminal to the control information (See the Abstract, line 27-28).

Jung et al. do not explicitly mention a mobile communication terminal.

Hirano et al., in analogous environment, teaches a cellular terminal image processing system, where using the mobile communication terminal (paragraph [0069], line 1-2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Hirano et al., where using a mobile communication terminal, in the system of Jung et al. in order to obtain a highly convenient mobile-terminal –type translation systems, mobile terminals, and servers for translation (paragraph [0012], line 2-4).

**(2) Regarding claim 2:**

Jung et al. further disclose the system, where the image processing unit compares at least one initialization value with at least one corresponding value from the control information (See the Abstract, line 27-28), (it is read that the digital signal processor compares (by analyzing) at least one initialization value with at least one corresponding value from the coordinates of each part of the recognized object)

**(3) Regarding claim 3:**

Jung et al. disclose all the subject matter as described in claim 2 above.

Jung et al. do not explicitly mention the system, where the user sets the initialization value.

Hirano et al., in analogous environment, teaches a cellular terminal image processing system, where the specialized dictionary categories can be designated by a user (paragraph [023], line 4-5), (the designating by a user of the specialized dictionary categories is read as the same concept as the setting of the initialization value by the user.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Hirano et al., where the user sets the specialized dictionary categories, in the system of Jung et al. in order to obtain a highly convenient mobile-terminal –type translation systems, mobile terminals, and servers for translation (paragraph [0012], line 2-4).

**(4) Regarding claim 4:**

Jung et al. further disclose the system, where the image processing unit detects a first difference between the at least one initialization value and the at least one corresponding value (See the Abstract, line 27-28), (it is read that the digital signal processor detects (by analyzing) a first difference between the at least one initialization value and the at least one corresponding value from the coordinates of each part of the recognized object).

**(5) Regarding claim 5:**

Jung et al. further disclose the system, where the control information comprises the first difference between the at least one initialization value and the at least one corresponding value processed from the image (See the Abstract, line 26-28), (the control information is read as the coordinate of each part of the recognized object)

**(6) Regarding claim 6:**

Jung et al. disclose all the subject matter as described in claim 5 above.

Jung et al. do not explicitly mention the system, where the user sets the first operational function of the terminal to correspond to the first difference.

Hirano et al., in analogous environment, teaches a cellular terminal image processing system, where the specialized dictionary categories can be designated by a user (paragraph [023], line 4-5), (the designating by a user of the specialized dictionary categories is read as the same concept as the setting of the first operational function).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Hirano et al., where the user sets the specialized dictionary categories, in the system of Jung et al. in order to obtain a highly convenient mobile-terminal –type translation systems, mobile terminals, and servers for translation (paragraph [0012], line 2-4).

**(7) Regarding claim 7:**

Jung et al. disclose a motion capture method, comprising:

photographing an object to produce images (See the Abstract, line 9-13);

processing the images for control information (See the Abstract, line 16-24), (the control information is read as the motion information).

setting an operational function to correspond to the control information (See the Abstract, line 26); and

wherein the control information is developed responsive to movement occurring

in the images (See the Abstract, line 22-24), (the calculating of coordinates of each of parts of the recognized object is read as the command control that occurs after each individual's movement)

Jung et al. do not explicitly mention the mobile communication terminal, and the operating of the mobile communication terminal.

Hirano et al., in analogous environment, teaches a cellular terminal image processing system, where using the mobile communication terminal (paragraph [0069], line 1-2), and operating the mobile communication terminal (paragraph [0036], line 11-14). (The Examiner assumes that Jung et al. disclose, "based on the control information").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Hirano et al., where using a mobile communication terminal, in the system of Jung et al. in order to obtain a highly convenient mobile-terminal –type translation systems, mobile terminals, and servers for translation (paragraph [0012], line 2-4).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jung et al. and Hirano et al., as applied to claim 7 above, and further in view of Neal (US-PGPUB 2003/0058236).

Jung et al. disclose a motion capture method, comprising:

extracting a first value from the processed image (See the Abstract, line 26), (the extracting of motion information is read as the same concept as the extracting of the first value from the processed image);



developing first control information (See the Abstract, line 27); and  
generating a control information signal based on the first control information (See the Abstract, line 28-29).

Jung et al. do not explicitly mention the method, where comparing the first value to an initialization value; and determining the first difference between the first value and the initialization value.

Neal, in analogous environment, teaches a method and apparatus for auto-generation of horizontal synchronization of an analog signal to digital display, where comparing the first value to an initialization value (paragraph [0037], line 4-6), (the comparing of the pixel clock to the feature edges is read as the same concept as the comparing of the first value to an initialization value); and determining the first difference between the first value and the initialization value (paragraph [0011], line 4-7), (the determining of the difference between the initialization value and the adjacent ones of pixels is read as the same concept as the determining the first difference between the first value and the initialization value).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Neal, where determining the difference, in the system of Jung et al. in order to have an efficient method and apparatus for automatically adjusting a clock and phase for incoming RGB signal suitable for display on fixed position pixel display such an LCD (paragraph [0009], line 1-4).

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jung et al., Hirano et al., and Neal, as applied to claim 8 above, and further in view of Nishi et al. (US-PGPUB 2002/018525).

Jung et al., Hirano et al., and Neal disclose all the subject matter as described in claim 8 above. Furthermore, Jung et al. disclose the extracting a first value from the images (See the Abstract, line 26), (the extracting of motion information is read as the same concept as the extracting of the first value from the images).

Jung et al., Hirano et al., and Neal do not explicitly mention the system, where setting one value as the initialization value.

Nishi et al., in analogous environment, teaches an image decoding method, where setting one value as the initialization value (paragraph [0136], line 1-5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Nishi et al., where setting one value as the initialization value, in the system of Jung et al. in order to reduce the delay time from the data input, and display the decoded images satisfactorily, even when the decoding process is started from a P frame (paragraph [0042], line 6-8).

**Allowable Subject Matter**

7. The following is an examiner's statement of reasons for allowance:

Independent claim 10 is allowable over the prior art of record.

Claims 15, and 16 depend from claim 10, therefore, are allowable.

Independent claim 10, recites the limitation of:

“wherein the producing the second image further comprises:

attributing a first value to a first midpoint located between the eyes

attributing a second value to a second midpoint located between a pair of shoulders,

attributing a first comprehensive value to a vector drawn through the first and second midpoint; and

attributing a second comprehensive value to an angle formed by the vector and a horizontal line joining the shoulders”.

The combination of these features as cited in the claims with other limitations of the claims, are neither disclosed nor suggested by the prior art of record.

The closest reference of US-PGPUB 2003/0063778 to Rowe et al. discloses a method for operating a mobile communication terminal. However, this reference either by itself or by combination with other references does not teach the limitations that the producing of the second image further comprises:

attributing a first value to a first midpoint located between the eyes

attributing a second value to a second midpoint located between a pair of shoulders,

attributing a first comprehensive value to a vector drawn through the first and second midpoint; and

attributing a second comprehensive value to an angle formed by the vector and a horizontal line joining the shoulders.

**Contact Information**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amara Abdi whose telephone number is (571)270-1670. The examiner can normally be reached on Monday through Friday 8:00 Am to 4:00 PM E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 2624

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